

BUSINESS DEPARTMENT - Business Services Facilities Development & Planning Branch 2425 Webster Ave., Long Beach, CA 90810 (562) 997-7550 FAX (562) 595-8644

January 30, 2006

### Via Fax and Hand Delivery

Ms. Angela Reynolds
City of Long Beach
Planning and Building Department
333 W. Ocean Boulevard
Long Beach, CA 90802

Re: Long Beach Airport Improvement Draft EIR SCH # 200309112

Dear Ms. Reynolds:

The Long Beach Unified School District ("School District") appreciates the opportunity to comment on the Long Beach Airport Area Terminal Improvement Project Draft Environmental Impact Report (DEIR) (SCH # 200309112) prepared by the City of Long Beach ("City").

While the District was originally established in 1885 with fewer than a dozen students meeting in a borrowed tent, it is now fully responsible for providing school facilities and public education services to more than 95,000 students in 95 public schools in the cities of Long Beach, Lakewood, Signal Hill, and Avalon on Catalina Island. It is the third-largest school district in the state of California and employs more than 8,000 teachers and staff, making it the largest employer in the City of Long Beach.

In addition to establishing high standards of academic excellence for its students, the School District is committed to providing a safe environment and school facilities for its students and employees. Thus, the School District's primary concern in its review of the DEIR is to distinguish the environmental impacts which must be properly addressed, analyzed, and mitigated to assure an environment conducive to learning. This comment letter identifies project impacts which may affect the health, safety, and welfare of the students and staff of schools located closest to the proposed project.

This comment letter also contains courses of action that could alleviate the impacts to the School District's students and employees.

#### **Overview of Potential Project Impacts on the School District**

The proposed Project described in the DEIR would be implemented at Long Beach Airport. Aviation activities are located just north of Interstate-405 ("I-405") and generally bound by Cherry Avenue to the west, City of Lakewood and the Boeing Property to the north, and Lakewood Boulevard to the east. It is the School District's understanding that the current Airport cover 1,166 acres and has five (5) runways, the longest being 10,000 feet. The Airport serves commercial carriers, general aviation, and air cargo. The area surrounding the Airport is a mix of commercial, industrial and residential development. Surrounding uses include the existing Boeing property and industrial uses in the City of Lakewood to the north.

The proposed Project would include improvements to the existing Airport Terminal Building and related facilities at the Airport in order to accommodate recent increases in flight activity at the Airport consisted with: (1) the Airport Noise Compatibility Ordinance; and (2) a 1995 settlement agreement between the City of Long Beach and commercial airlines operating at the Airport. It is the School District's understanding that the terminal area improvements are being designed to accommodate 41 airline flights and 25 commuter flights, passengers, associated with those flights, and security requirements imposed by TSA. The size of the facilities would increase from 56,320 square feet to 102,850 square feet.

It is also the School District's understanding that at the time the baseline for the DEIR was established there were no commuter operations at the Airport. Subsequently, America West and Delta have or will initiate daily commuter flights. The City, however, claims that the potential increase of up to 11 commercial airline flights and the initiation of 25 commuter flights are not causally related to the proposed Project. This is a major flaw in the DEIR that permeates throughout the entire document.

Based on the School District's review of the DEIR and the proposed Project details, it believes that there are at least 25 schools operating in the vicinity of the proposed Project. These school facilities are listed below and are all estimated to be within a five mile radius, with the closest school being only a half a mile away from the proposed Project.

- 1. Addams ES (#1): 5320 Pine Ave., Long Beach, CA 90805 (3 miles)
- 2. Barton ES (#4): 1100 East Del Amo Blvd., Long Beach, CA 90807 (1 3/4 miles)
- 3. Buffum ES (#9): 2350 Ximeno Ave., Long Beach, CA 90815 (1 3/4 miles)
- 4. Grant ES (#19): 1854 Britton Dr., Long Beach, CA 90815 (2 ½ miles)
- 5. Sutter MS (#76): 5075 Daisy Ave., Long Beach, CA 90805 (2 1/4 miles)
- 6. Special Education Building (SE): 5250 Los Coyotes, Long Beach, CA 90808 (1 mile)
- 7. Educational Partnership (#81): 4344 Atlantic Avenue, Long Beach, CA 90807 (1 ½ miles)
- 8. Bethune Transitional Center (#5): 2021 San Gabriel Ave., Long Beach CA 90810 (4 1/4 miles)
- 9. Bixby ES (#7): 5251 East Stearns St., Long Beach, CA 90815 (1 mile)
- 10. Garfield ES (#20): 2240 Baltic Avenue, Long Beach, CA 90810 (3 ½ miles)
- 11. Carver ES (#14): 5335 East Pavo St., Long Beach, CA 90808 (3 ¼ miles)
- 12. Longfellow ES (#34): 3800 Olive Ave., Long Beach, CA 90807 (1 1/4 miles)
- 13. Los Cerritos ES (#35): 515 West San Antonio Dr., Long Beach, CA 90807 (2 1/4 miles)
- 14. Madison ES (#38): 2801 Bomberry St., Lakewood, CA 90712 (1 mile)
- 15. Muir ES (#41): 3038 Delta Ave., Long Beach, CA 90810 (3 ½ miles)
- 16. Tucker ES (#49): 2221 Argonne Avenue, Long Beach, CA 90815 (3 ¼ miles)
- 17. Webster ES (#52): 1755 West 32nd Way, Long Beach, CA 90810 (3 3/4 miles)
- 18. Hill Classical MS (#62): 1100 Iroquois Avenue, Long Beach, CA 90815 (3 miles)
- 19. Hudson K-8 (& Maintenance Facility) (#64): 2335 Webster Avenue (4 miles)
- 20. Hughes MS (#65): 3846 California Avenue, Long Beach, CA 90807 (1 mile)
- 21. Lindbergh MS (#67): 1022 E. Market Street, Long Beach, CA 90805 (2 1/4 miles)
- 22. Stephens MS (#75): 1830 W. Columbus Street, Long Beach, CA 90810 (3 3/4 miles)
- 23. Cabrillo HS (#79): 2001 Santa Fe Avenue, Long Beach, CA 90810 (4 miles)
- 24. Reid HS (#88): 2152 W. Hill Street, Long Beach, CA 90810 (4 miles)
- 25. School for Adults (#91): 3701 E. Willow Street, Long Beach, CA 90815 (1/2 mile)

#### (See attached Figures)

Given the proximity of the proposed Project in the above listed schools, the School District is naturally concerned that implementation of the Project could have a significant impact (direct and indirect) on school facilities, students and staff.

## **Specific Concerns**

In the paragraphs that follow, the School District identifies the specific concerns it has regarding the proposed Projects, potential environmental, health and safety impacts and the deficient analysis contained within the DEIR. The DEIR should recognize that schools must be treated as a sensitive land use given the concentration of young children within and around these facilities for many hours of the school day and during after-school activities. In addition, students themselves must be treated as sensitive receptors given the disproportionate impacts certain pollutants have on children.

Secondly, the School District is concerned that the DEIR has failed to recognize the unique nature of school facilities under California law. Schools are one of the most protected and heavily regulated land uses. The development of new schools and expansion and modernization of existing schools trigger a myriad of special regulatory requirements for the District that are enforced by a variety of state agencies, which makes finding an adequate school site, and/or expanding an existing school site challenging. These regulations include review and approval by the California Department of Education, the Department of Toxic Substances Control and various other agencies, and often trigger special studies to confirm that stringent health and safety standards are met. Such studies may involve various agency consultations and oversight and the use of rigorous study protocols. This very high level of review creates great difficulty in constructing school facilities. Therefore, the School District is very concerned that the proposed Project may subsequently preclude it from upgrading or expanding the schools in the vicinity of the Project described above. These statutorily proscribed site constraints may also make it impossible to find new or replacement school sites in this community after the Project is complete.

The School District requests that the DEIR be revised to include an evaluation of the proposed Project's potential direct and indirect impacts on nearby school facilities in conformance with the school siting requirements established in Title 5, California Code of Regulations (CCR), the Education Code, and the Public Resources Code.

#### **Section 1.0, Executive Summary**

Page 1-6: Section 1.7 EIR Focus and Effects Found Not to Be Significant; Hazards and Hazardous Materials. The Initial Study Checklist asks "For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in a project area?" This question was determined to have a less than significant impact based on the finding that the project is consistent with the Airport Land Use Plan and that the proposed project does not "propose any changes in the number of flights, the flight patterns, or the operational procedures at the airport that would result in increased safety hazards offsite."

As discussed in the comments under Project Description, the proposed project involves growth-facilitating actions (i.e., enhancement of airport capacity) that accommodate increased flight operations and changes in airport-related traffic patterns. The DEIR should reevaluate this criterion and substantiate the fact that operational procedures, including safety procedures, will not be affected by the increased flight operations and changes in vehicle movement. Furthermore, it should be noted that the possibility of significant impacts are not precluded by a project being consistent with an adopted Plan.

Page 2-17: Section 2.7, Operational Considerations, paragraph one. The DEIR states that "The project is not proposing any modifications to the Noise Compatibility Ordinance or other actions that would directly or indirectly affect the number of aircraft operations at the Airport" (emphasis added).

While the Proposed Project would not modify the Noise Compatibility Ordinance and directly impact the number of aircraft operations, the proposed project involves other actions—such as a 40-percent increase in aircraft parking positions (from 10 to 14), a 38-percent increase in airline gates (from 8 to 11), and a 47-percent increase in vehicular parking capacity (from 4,935 to 6,286 spaces)—that are clearly growth facilitating. It is an established practice in CEQA analysis to characterize such features as indirectly encouraging growth, e.g., growth in the number of flights and/or spin-off growth of other types. The DEIR should acknowledge that there could be an indirect relationship between the expansion of these capacity-enhancing facilities and the likelihood that additional flights will rapidly follow despite of the Noise Compatibility Ordinance that currently restricts the number of flights. This correction in the Project Description would necessitate a careful reevaluation of project impacts and mitigation measures to assure that all aspects of potentially increased flight activity are adequately addressed throughout the DEIR.

Page 2-17: Section 2.7, Operational Considerations, paragraph two, sentence three. The DEIR states that "All 25 commuter flights are expected to be in regular service between December 2005 and Spring 2006." Because the Optimized Flight Scenario is allowed under the current Noise Compatibility Ordinance, the projected increase in flight operations is not fully analyzed as part of the project and would likely occur prior to the proposed project and without a discretionary review. However, although the Project Description specifically indicates that the proposed project would not directly or indirectly affect the number of aircraft operations at the airport, some of the analyses contained in the DEIR (e.g., Air Quality and Noise analysis) assess impacts associated with the projected flight increase and provide mitigation measures.

Although no direct link between the proposed project and the Optimized Flight Scenario has been established in the DEIR, it is evident that the proposed project will support the projected increase in flight operations and accommodate any future increase in numbers of flights. Given the proposed project's close relationship with the Optimized Flight Scenario, which would likely occur prior to project implementation, timing of mitigation measures associated with the Optimized Flight Scenario should be discussed in the DEIR and carried forward into the Mitigation Monitoring Program for implementation. This implementation timetable should be developed in coordination with the Long Beach Unified School District.

Footnote 11 (Paragraph two, sentence six). This footnote states that "...in February 1995, the City of Long Beach City Council certified Negative Declaration ND–19-94, which analyzed the settlement of the airport noise litigation between the City of Long Beach and a number of air carriers and other users of the Long Beach Airport titled Alaska Airlines et al. v. City of Long Beach. This settlement is the basis of the Airport Noise Compatibility Ordinance." This suggests that the CEQA documentation supporting the current flight restrictions was only a Negative Declaration and that the permitted flight increases under the Ordinance have not been properly evaluated. Therefore, although an increase in flight operations is not technically part of the project, appropriate CEQA review and assessment should be conducted.

Page 3.2-43: Section 3.3.2, Impact Analysis, Impact 3.3-3, Threshold 6, Table 3.2-21, Criterion 1. The air quality analysis evaluates whether the project is consistent with air-quality-related goals and policies. To assess consistency with the SCAQMD's Air Quality Management Plan (AQMP), project emissions are evaluated against Criterion 1, which addresses whether project emissions will increase the frequency or severity of violations of the ambient air quality standards.

The DEIR air quality analysis states, "construction of the Proposed Project would result in short-term significant, unavoidable  $NO_x$  emissions. Likewise, operations under the Optimized Flights Scenario would contribute to the exceedance of  $PM_{10}$  concentration standards. Implementation of the mitigation measures presented in Section 3.2.3 would reduce these impacts, but not to a level considered less than significant. Consequently, the Optimized Flights scenario would be consistent with the AQMP for the first criterion."

Provided that both the project's construction and operational phases would exceed SCAQMD thresholds and air quality standards, the conclusion should be that the Optimized Flight Scenario conflicts with the AQMP for the first criterion. The Optimized Flight Scenario would increase the frequency or severity of violations of the ambient air quality standards by creating unavoidable NO<sub>x</sub> emissions and exceeding PM<sub>10</sub> standards; therefore, could not be reconciled with the finding of being consistent with the AQMP. The analysis or the conclusion should be clarified or revised.

## Section 3.4, Hazards and Hazardous Materials & Section 3.7, Public Services

- 1. Page 3.4-19: Section 3.4.3, Mitigation Program, Standard Conditions and Requirements. Page 3.7-14: Mitigation Program, Standard Conditions and Regulations. Some of the requirements presented as standard conditions in the DEIR appear to be actually mitigation measures. Standard conditions should be those activities that are required under some existing law, regulation, or policy, while mitigation measures should be additional actions that are not otherwise required, but necessary to reduce potential impacts. The following "standard conditions" (SC) are not required under any regulations and should be listed under mitigation measures and included in the Mitigation Monitoring Program for implementation.
  - SC 3.4-4, SC 3.4-5, SC 3.4-8, SC 3.4-9, SC 3.7-3, and SC 3.7-4.

#### Section 3.5, Land Use and Relevant Planning

Page 3.5-3: Section 3.5.1, Sensitive Land Uses near the Airport. Table 3.5-1 identifies a total of 53 schools (public and private) within 2.5 miles (4 kilometers) of the airport and 23 hospitals within 1.5 miles (2.5 kilometers) of the airport. Although there are a significant number of these sensitive uses in the near vicinity of the project site, no further analyses or references were provided in the DEIR. The DEIR should provide additional information on the location and proximity of specific sensitive receptors to the airport as well as analysis of all potential impacts.

#### Section 3.6, Noise

Page 3.6-5: Subsection, Effects of Noise on Humans, last paragraph. This paragraph states, "As discussed in other sections of this report, speech interference begins at 65 dBA,

which is the level of normal conversation." However, this statement is inaccurate when applied to classroom settings because it fails to address the distance between the noise source and receiver. According to Exhibit 1-5 of Appendix F (Noise Study) of the DEIR, normal speech volume is permissible at 65 dBA background noise when there is a distance of two feet between listener and speaker. In comparison, typical classroom settings often have 25—to 35-foot distances between the teacher and students. Therefore, based on Exhibit 1-5 of Appendix F of the DEIR, a normal conversation would not be possible at 65 dBA and the teacher would have to shout for students to hear if background noise is at 65 dBA, as cited in the DEIR.

In addition, this same Exhibit shows that even if a teacher uses a raised voice, background noise levels would begin to interfere with speech at 50 dBA when speaker and listener are 32 feet apart. Therefore, considering that building structures attenuate outdoor noise levels by 20 dBA with windows closed and 12 dBA with windows open (as discussed in the DEIR), the DEIR should include an assessment of noise impacts to classroom speech at 70 dBA with windows closed and 62 dBA with windows open.

Page 3.6-18: Section 3.6.2, Impact Analysis, Proposed Project, Construction Related Impacts. The DEIR noise analysis assesses the impact of noise generated by individual construction equipment at the nearest noise-sensitive uses against the significance thresholds. However, this method of analysis understates the magnitude of noise impacts because it does not address the total noise levels attributable to multiple construction vehicles working concurrently, which is typical. For example, the air quality analysis performed for the project lists 19 construction vehicles/equipments used in a single day on the construction of the terminal. Multiple noise sources may increase noise levels substantially. Therefore, noise levels from multiple equipment sources, not individual, should be evaluated against the thresholds.

Page 3.6-19: Section 3.6.2, Impact Analysis, Proposed Project, Construction Related Impacts, paragraph two. This paragraph states that "no impacts associated with construction in the terminal area would occur." However, the noise levels shown in Table 3.6-7 show net noise levels of 43–52 dBA, which are higher than the 45 dBA (10 p.m. to 7 a.m.) and 50 dBA (7 a.m. to 10 p.m.) noise thresholds shown in Table 3.6-6. The noise analysis used these noise thresholds in the Long Beach Municipal Code as significance criteria. Because the net noise levels exceed these significance criteria, a significant daytime and nighttime impact should be declared for construction of the terminal area and the statement that there is no construction impact in the terminal area is inaccurate.

Page 3.6-22: Section 3.6.2, Impact Analysis, Additional Effects Related to Optimized Flights, CNEL Land Use Impacts. The DEIR identifies two District facilities (i.e., Minnie Gant Elementary School and the Special Education Building in the School Safety and Emergency Preparedness Offices) as being exposed to noise levels of 60–65 dBA CNEL due to the Optimized Flights Scenario. Attached Figure 1, Affected LBUSD School Sites, illustrates the location of proximate LBUSD schools and facilities in relation to the airport and projected noise contours under the Optimized Flights Scenario. The Optimized Flights Scenario would increase noise levels at these two school facilities by increasing both the magnitude of noise from each aircraft flyover as well as the number of such occurrences. However, the project's noise analysis dismisses the impact as not significant because it does not exceed state or federal noise standards. The EIR methodology needs to go beyond the use of a simplistic 65 dBA CNEL noise significance threshold and adequately evaluate the impacts of noise on sensitive receptors such as students.

The Optimized Flights Scenario would increase flights from a total of 41 to potentially 52 commercial and 25 commuter flights per day. This represents an increase of 36 flights (or an 88-percent increase) to a total of 77 flights per day. These additional flights would cause significantly more interruptions in school learning activities for both outdoor and indoor environments each day and every day. For nearby residences, the increase would cause more interruptions in television/radio listening, more awakening from daytime naps, and interference with conversations for residences under the flight path. These noise intrusions may be within the limits allowed under the FAA but would still lead to additional occurrences of speech and activity interference.

On page 3.6-4 the DEIR states "Communication interference includes speech interference and interference with activities such as watching television. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech." The 65 dBA CNEL standard is accepted for use by the state and federal governments, but it is not the only gauge by which impacts could be assessed.

#### Annoyance Level

Appendix F-16 of the DEIR states, "Annoyance levels have been correlated to CNEL levels." Exhibit 1-8 relates DNL (CNEL in California) noise levels to community response from two surveys. One of the survey curves presented in Exhibit 1-8 is the well-known Schultz curve, developed by Theodore Schultz. It displays the percentage of a populace that can be expected to be annoyed by various DNL values for residential land use with outdoor activity areas. At 65 dB DNL the Schultz curve predicts approximately 14 percent of the exposed population would report themselves to be "highly annoyed" and at 60 dB DNL the percentage decreases to approximately 8 percent of the population.

Affected school sites and area residences have been experiencing noise levels of less than 60 dBA CNEL. Assuming noise levels are 55 dBA, the Schults curve predicts that about 4 percent of the existing population is highly annoyed by airport noise. Under the Optimized Flights Scenario, the noise levels would increase to 60 - 65 dBA and the corresponding highly annoyed population percentage would increase to between 8 and 14 percent. The DEIR used the state and federal significance threshold level of 65 dBA CNEL to conclude that the impacts are less than significant. However, the number of people who would be highly annoyed by this increased airport activity would multiply by two to three, from 4 percent to between 8 and 14 percent. Any noise increase that would double or triple the number of highly annoyed population should be construed as a substantial permanent increase in noise levels and should not be disregarded as having less than significant impact.

#### Single-Event Noise Levels

The DEIR does not fully address the additional noise impacts from the increase in single-event aircraft flyovers on interior and exterior areas of noise-sensitive uses. Page 3.6-16 of the EIR states, "A single-event noise level (SENEL) of 90 dBA would produce a maximum noise level of approximately 80 dBA outdoors, directly under the flight path. The indoor maximum noise level for such a flight would be approximately 68 dBA for a home directly under the flight path."

Attached Figure 2, LBUSD Schools Affected by Single Event Aircraft Flyovers, shows the single event noise contours for 90 SEL and 85 SEL. Based on this figure, seven school facilities are

include within 90 SEL contour and 18 school facilities are included within 85 SEL contour, for a total of 25 impacted schools.

#### Schools Within 90 SEL

- 1. Addams ES (#1): 5320 Pine Ave., Long Beach, CA 90805 (3 miles)
- 2. Barton ES (#4): 1100 East Del Amo Blvd., Long Beach, CA 90807 (1 3/4 miles)
- 3. Buffum ES (#9): 2350 Ximeno Ave., Long Beach, CA 90815 (1 3/4 miles)
- 4. Grant ES (#19): 1854 Britton Dr., Long Beach, CA 90815 (2 ½ miles)
- 5. Sutter MS (#76): 5075 Daisy Ave., Long Beach, CA 90805 (2 1/4 miles)
- 6. Special Education Building (SE): 5250 Los Coyotes, Long Beach, CA 90808 (1 mile)
- 7. Educational Partnership (#81): 4344 Atlantic Avenue, Long Beach, CA 90807 (1 ½ miles)

#### Schools Within 85 SEL

- Bethune Transitional Center (#5): 2021 San Gabriel Ave., Long Beach CA 90810 (4 ¼ miles)
- 2. Bixby ES (#7): 5251 East Stearns St., Long Beach, CA 90815 (1 mile)
- 3. Garfield ES (#20): 2240 Baltic Avenue, Long Beach, CA 90810 (3 ½ miles)
- 4. Carver ES (#14): 5335 East Pavo St., Long Beach, CA 90808 (3 ¼ miles)
- 5. Longfellow ES (#34): 3800 Olive Ave., Long Beach, CA 90807 (1 1/4 miles)
- 6. Los Cerritos ES (#35): 515 West San Antonio Dr., Long Beach, CA 90807 (2 1/4 miles)
- 7. Madison ES (#38): 2801 Bomberry St., Lakewood, CA 90712 (1 mile)
- 8. Muir ES (#41): 3038 Delta Ave., Long Beach, CA 90810 (3 ½ miles)
- 9. Tucker ES (#49): 2221 Argonne Avenue, Long Beach, CA 90815 (3 1/4 miles)
- 10. Webster ES (#52): 1755 West 32nd Way, Long Beach, CA 90810 (3 3/4 miles)
- 11. Hill Classical MS (#62): 1100 Iroquois Avenue, Long Beach, CA 90815 (3 miles)
- 12. Hudson K-8 (& Maintenance Facility) (#64): 2335 Webster Avenue (4 miles)
- 13. Hughes MS (#65): 3846 California Avenue, Long Beach, CA 90807 (1 mile)
- 14. Lindbergh MS (#67): 1022 E. Market Street, Long Beach, CA 90805 (2 1/4 miles)
- 15. Stephens MS (#75): 1830 W. Columbus Street, Long Beach, CA 90810 (3 3/4 miles)
- 16. Cabrillo HS (#79): 2001 Santa Fe Avenue, Long Beach, CA 90810 (4 miles)
- 17. Reid HS (#88): 2152 W. Hill Street, Long Beach, CA 90810 (4 miles)
- 18. School for Adults (#91): 3701 E. Willow Street, Long Beach, CA 90815 (1/2 mile)

This indicates that approximately 80 dBA Leq of noise would be experienced at the outdoor playgrounds of these 22 school facilities, which would preclude teachers communicating with students beyond approximately 25 feet, even at the upper limits of shouting. The indoor noise level for classrooms during an aircraft overflight would be at least 68 dBA Leq, which would require teachers to shout to be heard by students located approximately 16 feet or more away (based on Exhibit 1-5 of the Appendix F of the DEIR).

When a flyover occurs, noise levels would jump from background noise levels of approximately 50–60 dBA to 80 dBA for exterior environments and from approximately 40–50 dBA to 68 dBA for interior environments. This is an increase in noise levels of 20–30 dB. Noise increases of 20 dB would be perceived as a fourfold increase in noise levels and noise increases of 30 dB would be perceived as an eightfold increase in noise levels. Page 3.6-18 of the DEIR lists as a threshold, "A substantial permanent increase in ambient noise levels in the project vicinity above existing levels existing without the project." Increasing noise levels by 20–30 dB or by a magnitude of eight constitutes a substantial permanent increase in ambient noise levels.

Because the Optimized Flight Scenario would result in single-event noise levels increasing 20–30 dB above background conditions without the project, leading to interruptions in educational instruction, daytime sleep, and conversations, among other disruptions, and because this would occur up to 36 more times every day with the project, it needs to be concluded that aircraft noise from the additional flights would be an unavoidable significant impact. The DEIR's finding of less than significant noise impacts, which is based on only the 24-hour cumulative CNEL noise descriptor, is misleading and inappropriate in assessing impacts to sensitive receptors such as schools. The cumulative 24-hour CNEL approach is not a comprehensive assessment for the school population which requires a quiet environment at all times for optimal learning. Though the overall noise level may be similar over a 24-hour period, there will be 36 more high-magnitude noise intrusions occurring on a daily basis. Under the Optimized Flights Scenario, the District school facilities would be exposed to a substantial permanent increase in ambient noise levels on a routine basis throughout the school day.

Though the magnitude of each flyover may be less intrusive than existing conditions, at 85–90 dBA SENEL they are still very intrusive. The DEIR should include a complete analysis of the single-event criterion and its effects on surrounding land uses. The analysis of noise impacts is deficient without properly finding that unavoidable significant impacts would occur on exterior and interior noise environments from the increase in the number of single-event flyovers.

Page 3.6-26: Section 3.6.3, Mitigation, Mitigation Measure MM3.6-2. The DEIR recognizes that the Optimized Flights Scenario would lead to adverse noise impacts and stipulates that mitigation measures which incorporate sound insulation treatment are necessary. However, the lead agency would only offer noise insulation in exchange for affected noise-sensitive receivers relinquishing their rights by signing an avigation easement. Noise levels at the Minnie Gant Elementary School and the Special Education Building located at the School Safety and Emergency Preparedness Offices of the Long Beach Unified School District, as noted above, would be exposed to noise levels of 60–65 dBA CNEL under the Optimized Flights Scenario as compared to the Year 2004 CNEL. This permanent increase in the 24-hour noise level is substantial and represents a significant noise impact. In addition, the number of impacted schools is not limited to two schools as stated in the DEIR but twenty-two schools based on the single event noise contours.

The Optimized Flights Scenario also results in potentially 36 more times when school activities would be interrupted by noise levels increasing from 55–60 dBA to 80 dBA during aircraft flyovers. This also constitutes a substantial permanent increase in noise levels due to single-event noise and as such is an unavoidable significant noise impact.

## **Recommendation**

Increasing the frequency of airport operations would lead to a greater number of occurrences of interference of speech intelligibility of students and faculty. This increase in noise may restrict the District's ability to expand and improve the existing schools. Noise analysis should identify all affected schools in the DEIR and evaluate site specific impacts and mitigation for each school.

The EIR should identify all feasible mitigation measures necessary and appropriate to reduce noise impacts to any of the District's school facilities potentially impacted by the Project. All feasible mitigation needs to be applied regardless of the District relinquishing rights under an avigation easement. CEQA does not require that mitigation need only be applied if residents or schools sign an avigation easement.

The DEIR must analyze the need for structural improvements to minimize noise from single event noise, which may include such improvements as acoustical rated windows and doors, insulation and roof treatments and vent treatments (such as baffles). Other mitigation measures may include installation of a microphone system in each classroom with mounted wall speakers for more effective classroom communication. Construction of a physical education building is one way to mitigate outdoor noise interference. In addition, mitigation should include regular periodic spot monitoring to check how well school noise insulation is attenuating impacts due to site-specific interior conditions.

### Section 4.0, Alternatives to the Proposed Project

Page 4-4: Section 4.3, Description of Alternatives Carried Forward. Both Alternative A and B are the same or similar to the proposed project in terms of key facilities (such as aircraft and vehicular parking, number of gates, and aircraft parking spaces) that can be considered capacity enhancing, as discussed in previous comments. Alternative C is the No Project Alternative. Consequently, there is no alternative considered that would constrain additional flights, with the exception of the No Project Alternative. This does not provide a reasonable range of alternatives that would reduce the real potential impacts of the project, namely, increased flight activity.

## Section 5.0, Long-Term Implications of the Project

Page 5-3: Section 5.2, Growth-Inducing Impacts, Effect on Fostering Growth at the Airport, paragraph one, last sentence. This sentence acknowledges, "An increase in flights would be experienced as a result of market forces and in response to unmet demand for air travel in the southern California region."

**Paragraph two, first sentence:** This sentence states, "The potential to induce growth can exist only when the capacity exceeds existing or future demand for air transportation."

There is extensive documentation of unmet demand for air travel capacity in the region, as noted in Comment 3 in Section 2.0-Project Description. Facilities that are proposed as part of this project will enhance the capacity of the Long Beach Airport and facilitate additional flights in response to that demand. Consequently, the project may have significant growth-inducing impacts.

Page 5-4: Section 5.3, Cumulative Impacts. Questions raised throughout these comments with respect to the level of significance of impacts may require reexamination and alteration of correlating conclusions regarding cumulative impacts as well.

## Potential Mitigation Measures for the Proposed Project

In order to ensure that none of the above-described Project impacts rise to a potentially significant level, the School District suggest that the DEIR include an analysis of the following potential mitigation measures to offset such impacts:

1. Acoustical rated windows and doors such as the installation of dual-paned windows to offset noise impacts to potentially impacted schools.

- 2. Insulation, roof treatments and construction of sound barriers for those schools/sites in the immediate vicinity of the proposed Project.
- 3. Construction of indoor lunchroom facilities so that students and staff have indoor facilities for lunch and other activities to offset noise impacts and to avoid unhealthful air quality.
- 4. Construction of gymnasiums/multipurpose rooms at school sites so that students and staff have indoor facilities for exercise and other activities to offset noise impacts and to avoid unhealthful air quality.
- 5. Improvements to the School District's air conditioning/filtration units and vent treatments such as baffles at schools within the immediate vicinity of the proposed Project to ensure adequate indoor air quality and to mitigate noise interference.
- 6. Microphone and/or public address system in each classroom with wall mounted speakers for more effective classroom communication.
- 7. Regular periodic spot monitoring to check noise interference at various school sites to verify if noise insulation and/or other mitigation is attenuating impacts due to site-specific interior conditions.

Thank you for the opportunity to respond to the DEIR. The District trusts that the City and the District can resolve all school facility, student and staff health and safety concerns in a collaborative manner. The District would also be happy to meet with the City and its consultants to discuss the impact of the Project on the District's facilities, students, and staff and potential mitigation measures to offset such impacts. If you have any questions or would like to arrange a meeting to discuss our concerns, please feel free to contact me at (562) 997-7550.

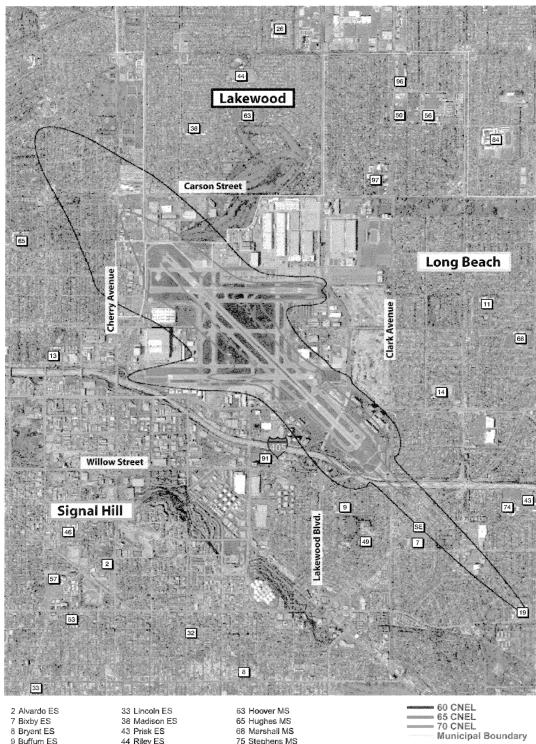
Sincerely,

Carri M. Matsumoto Executive Director

Facilities Development and Planning Long Beach Unified School District

cc: Chris Steinhauser – LBUSD Kim Stallings – LBUSD

## Affected LBUSD School Sites



- 2 Alvardo ES 7 Bixby ES 8 Bryant ES 9 Buffum ES 11 Burcham ES 13 Burroughs ES

- 14 Carver ES
- 19 Gant ES
- 26 Holmes ES
- 32 Lee ES

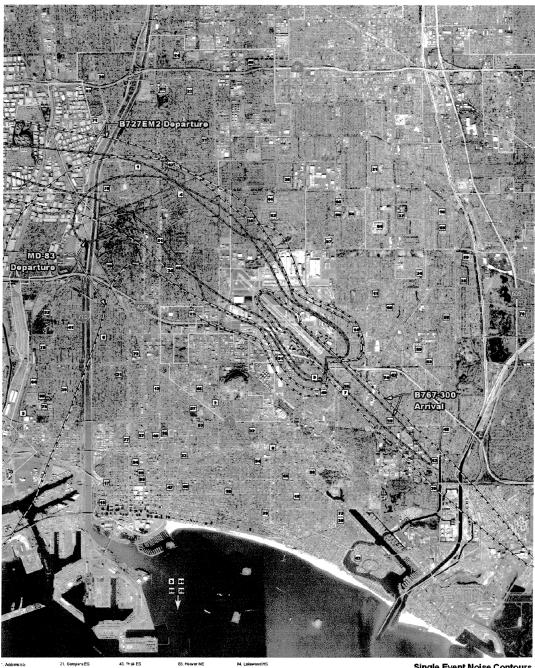
- 33 Lincoln ES 38 Madison ES 43 Prisk ES 44 Riley ES 46 Signal Hill ES 49 Tucker ES 50 Twain ES 53 Whittier ES 56 Bancroft MS 57 Butler K-8

- 63 Hoover MS 65 Hughes MS 68 Marshall MS 75 Stephens MS 84 Lakewood HS 91 School for Adults

- 91 School for Adults
  96 Long Beach City College Child Study Center
  97 Long Beach City College Liberal Arts Campus
  SE Special Education Building of School Safety and
  Emergency Preparedness Offices



# LBUSD Schools Affected by Single Event Aircraft Flyovers





43. Prisk ES
44. Ribry ES
45. Recoverat ES
46. Signal Hill ES
47. Playanson PS
48. Tincher K6
49. Lucker ES
57. Twell Lettons C

50. Twein ES

7: Two Hartons CD

62: Wholeve ES

53: White ES

54: Willing ES

54: Willing ES

56: Auskin MS

56: Bansrett MS

57: Bullin K6

50: Cubillin MS

60: Davidila MS

60: Tearlife MS

67: Ismillion MS

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 Long Baach City Cellega Child Stody Center
 Long Baach City Cellega Liberal Ats Campea
 SE. Spec all Education Subling of School Sofrey

**Single Event Noise Contours** 

85 SEL Contour 90 SEL Contour

